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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,506	02/14/2000	Sang-seo Lee	Q57599	6707

7590 05/04/2005

Sughrue Mion Zinn MACPeak & Seas
2100 Pennsylvania Avenue N. W.
Washington, DC 20037-3202

EXAMINER	
BLAIR, DOUGLAS B	

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 05/04/2005

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/503,506
Filing Date: February 14, 2000
Appellant(s): LEE, SANG-SEO

Cameron W. Beddard
Reg. No. 46,545
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2/7/2005.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 1-7 and 16-22 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

The rejection of claims 8 and 23 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,400,958	ISOMURSU	6-2002
6,185,208	LIAO	2-2001
6,141,550	AYABE	10-2000

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-7 and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,400,958 to Isomursu et al. in view of U.S. Patent Number 6,185,208 to Liao.

As to claim 1, Isomursu teaches a data sending protocol using a short message service (col. 5, lines 52-65), the transmission protocol comprising the steps of: (a) inserting a data connection service identifier into a user data field (col. 6, lines 29-60, the application identifier); (b) segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, and a field indicating a current short message number, into the user data field (col. 6, lines 1-28); (c) generating a short message field using the user data field (col. 6, lines 1-28); and (d) transmitting the short message field (col. 6, lines 29-60); however Isomursu does not explicitly teach a field indicating the number of short messages.

Liao teaches a field indicating the number of segmented short messages (col. 5, lines 17-55).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Isomursu regarding the provision of short message service with longer messages with the teachings of Liao regarding the a field indicating the number of segmented short messages because indicating the total number of messages in a longer message allows the receiver to reconstruct the original longer message (Liao, col. 5, lines 17-55).

As to claim 2, Isomursu teaches the data sending protocol of claim 1, wherein the step (a) uses a code for data connection service identifier which is not used in an ASCII code table (col. 6, lines 38-41).

As to claim 3, Isomursu teaches the data sending protocol of claim 1, wherein the step (a) uses a code data connection service identifier which is not used in a KS5601 standard (col. 6, lines 38-41).

As to claim 4, neither Isomursu nor Liao teach the use of the codes 98H or 99H; however it would be an obvious design choice to use such codes. It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to use the codes 98H and 99H because these codes represent arbitrary numbers and therefore would have been obvious choices for a numbered code that is arbitrary.

As to claim 5, Isomursu teaches a data sending protocol of claim 1, further comprising data connection service identifier in the user data field (col. 22, lines 24-55, the short message identifier.).

As to claim 6, Isomursu teaches a data sending protocol of claim 1, further comprising a step of (f) translating a delivery message and extracting an identifier requesting retransmission of data (col. 22, lines 24-55).

As to claim 7, Liao teaches a step of extracting a field indicating a total number of short messages (col. 5, lines 17-55) and Isomursu teaches a step of extracting a field indicating a retransmission request short message number (col. 22, lines 24-55).

As to claims 16-22, they feature the same limitations as claims 1-7, directed to apparatus for implementing the protocol from claims 1-7, and are thus rejected on the same basis as claims 1-7.

Claims 8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,400,958 to Isomursu et al. in view of U.S. Patent Number 6,185,208 to Liao in further view of U.S. Patent Number 6,141,550 to Ayabe et al..

As to claim 8, Isomursu teaches the data sending protocol of claim 7, wherein the step (f) further comprises generating a short message field using the user data field and retransmitting the short message field (col. 22, lines 24-55); however Isomursu does not explicitly teach inserting a data field corresponding to the number of the short message.

Ayabe teaches the insertion of, among segmented short messages, a short message data field corresponding to the retransmission request short message number, into a user data field (col. 7, lines 8-24).

It would have been obvious to one of ordinary skill in the Communications engineering art at the time of the invention to combine the teachings of Isomursu regarding a short message service implementation with the teachings of Ayabe regarding the insertion of a data field

corresponding to a retransmission request because inserting a number for retransmissions allows a receiver to determine which fields are duplicates (Ayabe, col. 7, lines 8-30).

As to claim 23, it features the same limitations as claims 7 and 8 and is thus rejected for the same reasons as claims 7 and 8.

(11) Response to Argument

The Appellant argues in Argument 1, that Insomursu et al. and Liao do not teach or suggest segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and field indicating a current short message number into the user data field. Specifically, the appellant is arguing that turning on a flag to indicate that the last segmented message is the end of a message, as taught by Liao (col. 6, lines 3-62, specifically lines 57-61) does not correspond to inserting a field indicating the number of segmented short messages into a user data field.

Liao teaches a system for segmenting a message that is too long to be transmitted whole using short messages (col. 6, lines 3-45). In Liao, the last segment of the message is indicated by turning on a flag (col. 57-61). Turning on a flag is considered inserting a field since the flag value is a field that is inserted into the last message and since the flag indicates the last message, it is thus indicating the total number of messages. Thus, the combination of Insomursu and Liao sufficiently teaches the idea of inserting a field indicating the number of segmented short messages into a user data field as claimed.

The appellant argues in Argument 2 that Insomursu et al. and Liao do not teach or suggest inserting a reference number field, which indicates a number for referring to a type of data connection service employed, into a position next to the data connection service identifier in

the user data field as in claim 5. The appellant's specification defines the reference number field as "a number referring to the type of data connection" (page 8, lines 2-3) and it defines the data connection service identifier as a hexadecimal number such as 98H or 99H (page 7, lines 22-25). These two definitions can be considered redundant because they are both numbers that identify data connection services.

There is no rationale provided for this redundancy and the appellant's specification never discloses any use of the reference number field. The appellant is not disputing that Insomursu is teaching a data connection service identifier. Therefore it would be an obvious design choice for someone to insert a redundant field that is not processed into a message because having such a field appears to be totally arbitrary and completely lacks any utility when the claims are interpreted in light of the applicant's specification.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Douglas Blair DBB
April 29, 2005

Conferees
Marc Thompson

MARC D. THOMPSON
MDT
PRIMARY EXAMINER

Jack Harvey

SUPERVISORY PATENT EXAMINER

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CLAIMS APPENDIX

CLAIMS 1-8 and 16-23 ON APPEAL:

1. A data sending protocol using a short message service, the data transmission protocol comprising the steps of:

(a) inserting a data connection service identifier into a user data field;

(b) segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number, into the user data field;

(c) generating a short message field using the user data field; and

(d) transmitting the short message field.

2. The data sending protocol of claim 1, wherein the step (a) uses a code, which is not used in an ASCII code table, for the data connection service identifier.

3. The data sending protocol of claim 1, wherein the step (a) uses a code, which is not used in a KS5601 standard, for the data connection service identifier.

4. The data sending protocol of claim 2 or 3, wherein the code is 98H or 99H.

5. The data sending protocol of claim 1, further comprising a step of (e) inserting a reference number field, which indicates a number for referring to the type of data connection service, into a position next to the data connection service identifier in the user data field.

6. The data sending protocol of claim 1, further comprising a step of (f) translating a delivery message and extracting an identifier requesting retransmission of data.

7. The data sending protocol of claim 6, wherein the step (f) comprises a step of (f-1) extracting a field indicating the total number of short message and a field indicating a retransmission request short message number.

8. The data sending protocol of claim 7, wherein the step (f) further comprises the steps of:

(f-2) inserting, among the whole segmented short messages, a short message data field corresponding to the retransmission request short message number, into a user data field; and

(f-3) generating a short message field using the user data field and retransmitting the short message field.

16. A data sending apparatus using a short message service, the apparatus comprising:

data connection service identifier inserting means for inserting a data connection service identifier into a user data field;

short message processing means for segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number, into the user data field;

short message field generating means for generating a short message field using the user data field; and

transmitting means for transmitting the short message field.

17. The data sending apparatus of claim 16, wherein the data connection service identifier inserting means uses a code, which is not used in an ASCII code table, for the data connection service identifier.

18. The data sending apparatus of claim 16, wherein the data connection service identifier inserting means uses a code, which is not used in a KS5601 standard, for the data connection service identifier.

19. The data sending apparatus of claim 17 or 18, wherein the code is 98H or 99H.

20. The data sending apparatus of claim 16, further comprising reference number field inserting means for inserting a reference number field, which indicates a number for referring to the type of data connection service, into a position next to the data connection service identifier in the user data field.

21. The data sending apparatus of claim 16, further comprising short message field translating means for translating a delivery message and extracting an identifier requesting retransmission of data.

22. The data sending apparatus of claim 21, wherein the short message field translating means comprises means for extracting a field indicating the total number of short message and a field indicating a retransmission request short message number.

23. The data sending apparatus of claim 21, wherein the short message processing means receives a field indicating the total of segmented short messages and a field indicating a retransmission request short message number from the short message field translating means, and inserting a data field corresponding to the retransmission request short message number into

a user data field; and the short message field generating means generates a retransmission short message field using the user data field.

EVIDENCE APPENDIX

There has been no evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other evidence entered by the Examiner and relied upon by Appellant in the appeal.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Sang-seo LEE

Appln. No.: 09/503,506

Confirmation No.: 6707

Filed: February 14, 2000

Docket No: Q57599

Group Art Unit: 2142

Examiner: Douglas Blair

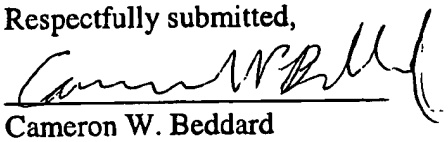
For: DATA TRANSMISSION PROTOCOL USING SHORT MESSAGE SERVICE

SUBMISSION OF APPEAL BRIEF

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Sir:

Submitted herewith please find an Appeal Brief. A check for the statutory fee of $500.00 is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,



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WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: February 7, 2005

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of	Docket No: Q57599
Sang-seo LEE	
Appln. No.: 09/503,506	Group Art Unit: 2142
Confirmation No.: 6707	Examiner: Douglas Blair
Filed: February 14, 2000	

For: DATA TRANSMISSION PROTOCOL USING SHORT MESSAGE SERVICE

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

Table of Contents

I. REAL PARTY IN INTEREST

The real party in interest is SAMSUNG ELECTRONICS CO., LTD., by virtue of an assignment executed by Sang-seo LEE, (Appellant hereafter) on March 3, 2000 and recorded by the Assignment Branch of the U. S. Patent and Trademark Office on September 1, 2000 (at Reel 011098, Frame 0330).

II. RELATED APPEALS AND INTERFERENCES

To the knowledge and belief of Appellant, the Assignee, and the undersigned, there are no other appeals or interferences before the Board of Appeals and Interferences that will directly affect or be affected by the Board's decision in the instant Appeal.

III. STATUS OF CLAIMS

Claims 1-29 are pending in the application.

Claims 9-15 and 24-29 have been withdrawn from consideration.

Claims 1-8 and 16-23 are rejected.

The rejections of claims 1-8 and 16-23 are being appealed.

IV. STATUS OF AMENDMENTS

All Amendments are believed to have been previously entered and made of record.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 1 of the present application recites a data sending protocol using a short message service, the data transmission protocol comprising the steps of: (a) inserting a data connection service identifier into a user data field (p. 7, line 22 - p. 8, line 3 and lines 6-8); (b) segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number, into the user data field (p. 8, lines 3-8); (c) generating a short message field using the user data field (p. 8, lines 8-9); and (d) transmitting the short message field (p. 8, lines 9-10).

Independent claim 16 of the present application recites a data sending apparatus using a short message service (FIG. 4; p. 7, lines 18-21), the apparatus comprising: data connection service identifier inserting means 402 for inserting a data connection service identifier into a user data field (p. 7, line 22 - p. 8, line 1); short message processing means 406 for segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number, into the user data field (p. 8, lines 3-8); short message field generating means 440 for generating a short message field using the user data field (p. 8, lines 8-9); and transmitting means 460 for transmitting the short message field (p. 8, lines 9-10).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-7 and 16-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Isomursu et al. (US 6,400,958) in view of Liao (US 6,185,208).

Claims 8 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Isomursu et al. and Liao in view of Ayabe et al. (US 6,141,550).

VII. ARGUMENT

Appellant respectfully submits that the claims would not have been obvious over the applied references.

Argument 1: Isomursu et al. and Liao do not teach or suggest segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number into the user data field.

Claim 1 recites segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number into the user data field. The Examiner concedes that Isomursu et al. does not disclose a field indicating the number of short messages (p. 3, lines 5-6 of the Office Action dated February 6, 2004), but asserts that Liao discloses this feature of claim 1.

In the Response filed May 6, 2004, Appellant argued that Liao does not teach inserting a field indicating the number of segmented short messages into the user data field. In the "Response to Arguments" of the Office Action dated August 4, 2004, the Examiner responded to this argument by asserting that col. 6, lines 57-61 of Liao indicates the last short message and therefore the total number of messages.[1] Appellant respectfully disagrees. The cited excerpt discloses that when the last fragment is received, a flag in the last segment is turned on to indicate the end of the message. However, the turning on of a flag does not correspond to inserting a field. Furthermore, indicating the end of a message does not correspond to indicating

[1] Page 5, lines 15-17.

the number of segmented short messages into the user data field. Therefore, claim 1 is allowable over the prior art.

Claims 2-7 are allowable over the prior art, at least because of their dependence from claim 1.

Argument 2: Isomursu et al. and Liao do not teach or suggest inserting a reference number field, which indicates a number for referring to a type of data connection service employed, into a position next to the data connection service identifier in the user data field.

In the Response filed May 6, 2004, Appellant argued that Isomursu et al. fails to teach or suggest the feature of claim 5 of inserting a reference number field, which indicates a number for referring to a type of data connection service employed, into a position next to the data connection service identifier in the user data field. Instead, Isomursu et al. only discloses inserting an application identifier into the INFO field. Moreover, the INFO field does not correspond to the user data field recited in the claim. Rather, the INFO field is an information field of the short message transmission frame containing the actual short message in characters. See col. 6, lines 34-38 of Isomursu et al.

The Examiner does not rebut this argument. Rather, the Examiner responds in the "Response to Arguments" of the Office Action dated August 4, 2004 by asserting that the reference number field is a non-functional limitation, because the Appellant's specification does not provide details as to how or even if the reference number field is processed at the receiving end. Further, the Examiner asserts that Isomursu et al. teaches a data connection service

identifier as cited above, i.e., the application identifier.[2] In response to the Examiner's assertions, Appellant provides the following comments.

First, the present specification describes the inserting of the reference number field on p. 7, line 22 – p. 8, line 10. The reference number field is illustrated in FIG. 6 of the present application. All of the features of claim 5 are entitled to patentable weight, as recited in the claim. The recitation in claim 5 of inserting a reference number field, which indicates a number for referring to a type of data connection service employed, into a position next to the data connection service identifier in the user data field is one of the steps of the claimed data sending protocol. The claim does not need to recite how the reference number field is processed at the receiving end. Such processing is not part of the claimed invention.

Second, claim 5 does not simply recite a data connection service identifier. Thus, whether Isomursu et al. discloses a data connection service identifier does not resolve the issue of whether Isomursu et al. discloses the features of claim 5. In other words, providing a data connection service identifier in Isomursu et al. does not correspond to inserting a reference number field, as claimed in claim 5. Thus, claim 5 is allowable for the reasons described in the May 6 Response.

Claim 20 is allowable over the prior art for reasons analogous to those for claim 5.

With regard to the rejection of claim 8 over Isomursu et al. and Liao in view of Ayabe et al., Appellant submits that claim 8 is allowable over the prior art, at least because of its

[2] Page 5, lines 18-20.

dependence from claim 1, and because Ayabe et al. does not make up for the deficiencies of Isomursu et al. and Liao.

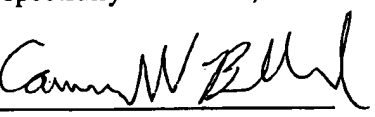
Furthermore, claims 16-23 are allowable over the prior art for reasons analogous to those presented above for claims 1-8.

Appellant respectfully requests the members of the Board to reverse the rejection of all appealed claims and to find each of the claims allowable as defining subject matter which is patentable over the applied references.

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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